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INDEX OF WATERBODIES

WATERBODIES

Chesapeake Bay

i, iii, I-3, I-5, I-12, I-13, II-1, II-13, II-14, II-16, II-19, II-21, II-26, II-27, II-28, II-29, II-30, II-34, II-38, II-39, II-40, II-44, II-49, II-50, II-52, II-53, II-54, II-56, II-58, II-60, II-62, II-65, II-66, II-72, II-73, II-75, III-1, III-34, III-38, III-39, III-40, III-41, III-52, III-65, IV-7, IV-11, IV-13, IV-14, IV-15, IV-16, IV-17, IV-18, IV-19, IV-24, V-15

Everglades

III-5, III-53, III-54, III-55, IV-12, IV-13

Great Lakes

i, ii, iii, iv, I-1, I-2, I-3, I-5, I-12, I-13, II-8, II-9, II-11, II-12, II-17, II-18, II-19, II-20, II-21, II-22, II-23, II-28, II-30, II-31, II-32, II-33, II-34, II-35, II-36, II-37, II-49, II-50, II-57, II-58, II-59, II-60, II-61, II-63, II-64, II-65, II-66, II-67, II-68, II-69, II-70, II-71, II-73, II-75, III-1, III-31, III-34, III-35, III-36, III-37, III-49, III-60, III-66, III-67, III-68, III-69, IV-4, IV-6, IV-7, IV-9, IV-10, IV-13, IV-15, IV-18, IV-24, V-4, V-7, V-8, V-9, V-10, V-11, V-12, V-14, V-15

Lake Michigan

I-12, II-13, II-14, II-17, II-21, II-32, II-33, II-36, II-37, II-59, II-60, II-61, II-63, II-64, II-65, II-66, II-67, II-69, III-34, III-35, III-36, III-37, III-64, IV-13, IV-14, IV-15, IV-16, IV-19, IV-22, V-4, V-9

Lake Erie

II-12, II-21, II-33, II-58, II-60, II-61, II-63, II-64, II-65, II-67, III-36, III-37

Lake Superior

II-21, II-32, II-33, II-36, II-56, II-58, II-59, II-60, II-63, II-64, II-65, II-66, II-67, II-69, III-30, III-36, III-37, III-59, IV-16, IV-17

Lake Huron

II-31, II-33, II-36, II-59, II-60, II-63, II-64, II-66, II-67, II-69, III-36, III-37, IV-21

Lake Ontario

II-12, II-19, II-33, II-32, II-56, II-60, II-61, II-63, II-64, II-65, II-66, II-67, III-36, II-37, IV-19, IV-21, IV-22

Gulf of Mexico

I-5, I-13, II-34, II-55, II-56, II-57, II-71, III-1, III-41, III-42, III-48, IV-9, IV-16, IV-17, IV-18

Lake Champlain

i, I-3, I-5, I-12, II-1, II-11, II-14, II-15, II-49, II-50, II-57, II-69, II-73, II-75, III-1, III-37, III-38, V-14

Mississippi River/Delta

II-8, II-51, II-54, II-56, III-41, III-42, IV-17

Neuse River

II-54, III-43

Peconic Bay

II-53, III-42

St. Lawrence River

II-17, II-28, II-60, III-36, V-11

NATIONAL ESTUARY PROGRAM WATERBODIES

Albemarle-Pamlico Estuary

I-3, II-52, II-53, II-56, III-6, III-30, III-42, III-51

Casco Bay

I-3, III-42, III-43

Charlotte Harbor

III-42, III-43

Coastal Bend Bay (and Estuary)

III-42, III-43

Delaware Inland Bays

II-53, III-42, III-43, III-44

Delaware Estuary (or Bay)

II-16, II-17, II-19, II-30, II-34, II-52, II-53, II-72

Galveston Bay

I-3, II-34, II-72

Long Island Sound

ii, II-13, II-14, II-19, II-27, II-52, II-53, II-54, II-56, II-72, III-42, III-44, V-8

Massachusetts Bay

II-27, II-37, II-38, II-53, III-42, III-44, IV-9

Narragansett Bay

II-52, II-53, II-72, III-44

New York Bight

I-3, II-52, II-53

New York/New Jersey Harbor

II-56, III-42, III-44, III-45

San Francisco Bay (or Estuary)

I-3, II-1, II-76, III-42, III-45

Santa Monica Bay

I-3, III-42, III-45

Sarasota Estuary (or Bay)

II-49, II-53, III-42, III-46

Tampa Bay

I-3, II-49, II-53, II-56, II-70, II-72, III-42, III-46, III-47, III-48

NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM WATERBODIES

Chesapeake Bay (MD and VA)

(See above under "Waterbodies")

Delaware Inland Bays

(See above under "Waterbodies")

Delaware Estuary (or Bay)

(See above under "Waterbodies")

Hudson River

III-45

Narragansett Bay

(See above under "Waterbodies")

Waquoit Bay

II-51, II-52, II-53, II-55, II-56

APPENDIX A Major Sources of Information: Publications and Internet Sites

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INTERNET SITES

Chesapeake Bay Program

http://www.chesapeakebay.net

Commission for Environmental Cooperation

http://www.cec.org

Environment Canada Great Lakes Regional Programs

http://www.cciw.ca/glimr/program.html

Great Lakes Information Network

http://www.great-lakes.net

Great Lakes National Program Office

http://www.epa.gov/glnpo

Gulf of Mexico Program Office

http://pelican.gmpo.gov

Integrated Atmospheric Deposition Network - Environment Canada

http://airquality.tor.ec.gc.ca/IADN

Integrated Atmospheric Deposition Network - U.S. EPA

http://www.epa.gov/grtlakes/air

International Joint Commission

http://www.ijc.org

Lake Champlain Basin Program

http://www.anr.state.vt.us/champ

Lake Michigan Mass Balance Study (LMMBS)

http://www.epa.gov/glnpo/lmmb

Michigan State Mercury Pollution Prevention

http://www.deq.state.mi.us/ead/p2sect/mercury

National Atmospheric Deposition Program/AIRMoN

http://nadp.sws.uiuc.edu/airmon

National Atmospheric Deposition Program/National Trends Network (NADP/NTN)

http://nadp.sws.uiuc.edu

National Atmospheric Deposition Program/Mercury Deposition Network (NADP/MDN)

http://nadp.sws.uiuc.edu/mdn

National Estuarine Research Reserve System (NERRS)

http://inlet.geol.sc.edu/nerrsintro.html

National Estuary Program (NEP) http://www.epa.gov/nep

NOAA Air Resources Laboratory, AIRMoN-Dry http://www.arl.noaa.gov/research/projects/airmon_dry.html

North American Agreement on Environmental Cooperation (NAAEC) http://www.naaec.gc.ca/english/index.html

Persistent Bioaccumulative Toxics (PBT) Initiative http://www.epa.gov/pbt

U.S. Environmental Protection Agency (EPA) http://www.epa.gov

APPENDIX B

Detailed Breakdown of Air Emissions Inventory by Pollutant for Source Categories Emitting Less than 1 Percent of Total U.S. Emissions

This appendix lists the source categories that contribute less than 1 percent to total U.S. emissions for mercury and compounds, lead and compounds, cadmium and compounds, dioxins and furans, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). This information is from EPA's *Mercury Study Report to Congress* (U.S. EPA 1997e) for mercury and compounds and from EPA's 1993 National Toxics Inventory (NTI) for the remaining compounds (U.S. EPA 1999a). This list is referenced in Tables II-1, II-4, II-5, II-11, II-14, and II-22, in which the source categories contributing greater than 1 percent to total U.S. emissions are listed along with the percent contribution to total U.S. emissions.

MERCURY AND COMPOUNDS

Batteries
Byproduct Coke
Carbon Black
Crematories
Electrical Apparatus
Flourescent Lamp Recycling
Geothermal Power
Instruments Manufacturing
Lime Manufacturing

Pigments, Oil, etc.
Primary Copper
Primary Lead
Primary Mercury Production
Refineries
Secondary Mercury Production
Sewage Sludge Incinerators
Turf Products
Wood-fired Boilers

LEAD AND COMPOUNDS

Abrasive Products

Mercury Compounds

Adhesives and Sealants

Aerospace Industry (Surface Coating)

Agricultural Production

Agricultural Chemicals and Pesticides

Air and Gas Compressors

Air, Water, & Solid Waste Management

Aircraft Engines and Engine Parts Manufacturing

Aircraft Manufacturing

Aircraft Parts and Equipment Manufacturing

Aircraft And Parts

Airports, Flying Fields, & Services Aluminum Extruded Products Aluminum Foundries

Aluminum Foundries (Castings)

Aluminum Sheet, Plate, and Foil manufacturing

Aluminum Die-Castings

Ammunition, Except for Small Arms

Amusement Parks

Amusement And Recreation, Nec

Animal Cremation Asphalt Paving Production

Asphalt Paving Mixtures And Blocks

Asphalt Production
Asphalt Roofing Production

Automotive stampings

Automotive Dealers, Nec

Aviation Gasoline Distribution: Stage I & II

Beet Sugar

Black Liquor Combustion Blast Furnaces and Steel Mills Boat Building and Repairing

Bolts, Nuts, Rivets and Washers Manufacturing

Bookbinding And Related Work Botanical And Zoological Gardens

Brass, Bronze, Copper, Copper Base Alloy Foundries

Bread, Cake, And Related Products Brick and Structural Clay Tile Business services, nec (1987)

Canned specialties

Canned Fruits and Vegetables Carbon and Graphite Products Carbon Black Manufacture

Carburetors, Pistons, Rings and Valves Manufacturing Cathode Ray Television Picture Tubes Manufacturing

Cement, Hydraulic (not subject to Portland Cement Regulation)

Ceramic Wall and Floor Tile Manufacturing

Chemical Manufacturing: Explosives & Blasting Agents

LEAD AND COMPOUNDS (CONTINUED)

Chemical Preparations

Chemical Manufacturing: Cyclic Crude and Intermediate

Production

Chemicals and Allied Products Manufacturing Chromium Plating: Chromic Anodizing Plating Coated Fabrics, not Rubberized, Manufacturing Coke Ovens: By-product Recovery Plants

Cold Finishing of Steel Shapes Commercial Printing, Lithographic Commercial Printing, nec Commercial Physical Research

Commercial/Institutional Boilers: Coal Combustion, all types Commercial/Institutional Heating: Anthracite Coal Combustion Commercial/Institutional Heating: Bituminous and Lignite Coal

Combustion

Commercial/Institutional Heating: Distillate Oil Combustion Commercial/Institutional Heating: Natural Gas Combustion Commercial/Institutional Heating: Residual Oil Combustion Commercial/Institutional Heating: Wood/Wood Residue

Combustion

Communications Equipment, nec Computer Peripheral Equipment, nec Construction Machinery Manufacturing

Construction (SICs 15-17) Construction Sand And Gravel

Conveyors and Conveying Equipment Manufacturing

Copper Rolling and Drawing

Copper Foundries Cordage and Twine Correctional Institutions Costume Jewelry Cotton

Cottonseed Oil Mills Courts

Crop Preparation Services For Market Crude petroleum and natural gas Crude Petroleum Pipelines Crushed And Broken Limestone Crushed And Broken Stone, Nec Crushed And Broken Granite Current-carrying Wiring Devices

Custom Compound Purchased Resins Manufacturing

Dehydrated fruits, vegetables, and soups

Depository Institutions
Dog and Cat Food

Drum and Barrel Reclamation

Durable Goods, Nec

Electric and other services combined

Electric Lamps Electric services

Electrical Equipment and Supplies, nec Electrical Industrial Apparatus, nec Electrical Apparatus and Equipment Electromedical Equipment Manufacturing

Electrometallurgical Products Electron Tubes Manufacturing Electronic Components, nec Electronic Computers

Electronic Computing Equipment

Electronic Connectors

Electronic Capacitors Manufacturing

Electronic Resistors

Elevators and Moving Stairways Manufacturing

Engine Electric Equipment

Engineering Services

Environmental Controls Manufacturing Fabricated Metal Products, nec Fabricated Plate Work (Boiler Shops) Fabricated Rubber Products, nec Fabricated Structural Metal Manufacturing Fabricated Structural Metal Products

Farm Machinery and Equipment Manufacturing

Ferroalloy Ores, Except Vanadium

Fertilizers, Mixing only

Flat Glass

Fluid power Valves and Hose Fittings Manufacturing

Fluid Meters and Counting Devices

Food and Agricultural Products: Cotton Ginning

Food Preparations Production

Food Products Machinery Manufacturing Frozen fruits, fruit juices and vegetables Funeral Service And Crematories Furniture and Fixtures Manufacturing Gas And Other Services Combined

Gaskets, Packing and Sealing Devices Manufacturing

Gasoline Distribution Stage II Gasoline Distribution Stage I

General Industrial Machinery Manufacturing

General Automotive Repair Shops General Medical & Surgical Hospitals

Glass Containers Gold Ores

Grain And Field Beans Gray and Ductile Iron Foundries

Greeting Cards Grocery Stores

Guided Missiles and Space Vehicles Manufacturing

Halogenated Solvent Cleaners Hand and Edge Tools Manufacturing

Hardware Manufacturing

Heating Equipment, Except Electric

Heavy Construction, Nec

Hospitals Hotels And Motels

Household Cooking Equipment Household Audio and Video Equipment Hunting, Trapping, Game Propagation Industrial Boilers: Residual Oil Combustion

Industrial Boilers: Bituminous and Lignite Coal Combustion

Industrial Boilers: Coal, all types

Industrial Boilers: Distillate Oil Combustion
Industrial Boilers: Natural Gas Combustion
Industrial Boilers: Anthracite Coal Combustion
Industrial Boilers: Waste Oil Combustion

Industrial Boilers: Wood/Wood Residue Combustion

Industrial Gases Manufacturing

Industrial Inorganic Chemical Manufacturing Industrial machinery and equipment Industrial Organic Chemicals Manufacturing

Industrial Sand Industrial Supplies

Industrial Trucks and Tractors Manufacturing Industrial/Utility Dist. Oil/Diesel Turbines Inorganic Pigments Manufacturing Instruments to Measure Electricity Integrated Iron and Steel Mills

LEAD AND COMPOUNDS (CONTINUED)

Intercity & Rural Bus Transportation Internal Combustion Engine Manufacturing Iron and Steel Foundries: Steel Foundries

Iron and Steel Foundries: Steel Investment Foundries

Iron and Steel Forging

Laminated Plastics Plate and Sheet Lead Pencils, Art Goods Manufacturing

Life Insurance Lighting Equipment Lightweight Aggregate Kilns

Lime

Lubricating Oils and Greases Malleable Iron Foundries

Malt Beverages

Manufacturing Industries Manufacturing

Marine Cargo Handling

Measuring and Controlling Devices, nec Meat Packing Plants Membership Sports & Recreation Clubs

Metal cans (3411)

Metal coating and allied services (3479)

Metal Coil (Surface Coating)

Metal Barrels, Drums, and Pails Manufacturing

Metal Foil and Leaf

Metal Forgings and Stampings Metal Heat Treating Manufacturing Metal Sanitary Ware Manufacturing Metal Stampings Manufacturing

Metal Valves

Mineral Wool Manufacturing (includes Wool Fiberglass)

Mineral Wool

Minerals, Ground or Treated Production Mining Machinery Manufacturing Miscellaneous Plastics Products Miscellaneous Fabricated Wire Products

Miscellaneous Metal Work

Miscellaneous Nonmetallic Minerals Miscellaneous Fabricated Metal Products Miscellaneous Plastics Products, nec

Mobile Sources: Railroads

Mobile Sources: Non-Road Vehicles and Equipment -

Commercial Marine Vessels MON - Continuous Processes Motion Picture & Video Production Motor Vehicle Equipment

Motor Vehicle Parts and Accessories Manufacturing Motor Vehicles and Car Bodies Manufacturing

Motor and Generators Manufacturing

Musical Instruments National Security Natural Gas Liquids Newspapers

Non-road Mobile Vehicles

Noncommercial research organizations (1987)

Noncurrent-Carrying Wiring Devices Nonferrous Foundries, nec Nonferrous Rolling and Drawing Nonferrous Wire Drawing and Insulating

Nonferrous Forgings

Nonferrous Die-castings, Except Aluminum Nonmetallic Mineral Products Manufacturing

Nursing And Personal Care, Nec

Office Machines

Office Furniture, Except Wood Manufacturing

Oil And Gas Field Services, Nec

Oil and Gas Field Machinery Manufacturing

On-Site Waste Incineration Open Burning: Forest and Wildfires Open Burning: Scrap Tires

Optical Instruments and Lenses

Ophthalmic Goods

Ordnance and Accessories Manufacturing Organic Fibers, Non-cellulosic Manufacturing

Ornamental Nursery Products Other Structural Clay Products Paint Application: Medium Shops Paint Application: Large Shops

Paints and Allied Products Manufacturing Paper Coated and Laminated, Packaging, nec

Paperboard Mills Paved Road Dust Petroleum Refining Petroleum Refining

Petroleum Refining: Catalytic Cracking Units Petroleum Refining: Other Petroleum Products Petroleum Bulk Stations and Terminals Pharmaceutical Preparations Manufacturing

Phosphatic Fertilizers

Plastics Materials and Resins Manufacturing

Plastics Products Manufacturing Plastics Foam Products Manufacturing Plumbing Fixture Fittings and Trim Porcelain Electrical Supplies

Portland Cement Manufacture: All Fuels Potash, Soda, And Borate Minerals Potato Chips and Similar Snacks

Pottery Products, nec

Power Transmission Equipment Prefabricated Metal Buildings Prepared Feeds Manufacturing Primary Aluminum Production

Primary Batteries, Dry and Wet, Manufacturing

Primary Copper

Primary Metal Products Manufacturing Primary Smelting and Refining of Zinc Printing Ink

Printing Trades Machinery Manufacturing

Products of Purchased Glass

Pulp mills (2611)

Pulp and Paper: Kraft Recovery Furnaces Pumps and Pumping Equipment Manufacturing

Radio and Television Communications Equipment (3662) Radio and Television Communications Equipment (3663)

Railroad Equipment Manufacturing Railroads, Line-haul Operating

Ready-mixed Concrete

Refrigeration and Heating Equipment Manufacturing

Refuse Systems

Relays and Industrial Controls

Repair services, nec

Residential Bituminous and Lignite Coal Combustion

Residential Care

Residential Distillate Oil Combustion Residential Anthracite Coal Combustion Residential Wood/Wood Residue Combustion

Rice Milling

Rubber and Plastic Hose and Belting Manufacturing

Sawmills and Planing Mills, general

LEAD AND COMPOUNDS (CONTINUED)

Schools & Educational Services, Nec

Scrap And Waste Materials

Screw Machine Products, Bolts, etc.

Screw Machine Products Manufacturing

Search and Navigation Equipment Secondary Aluminum Smelting

Semiconductors and Related Devices

Semivitreous Table & Kitchenware

Service Industry Machinery

Sewage Sludge Incineration

Sewerage Systems

Sheet Metal Work

Ship Building & Repair

Ship Building And Repairing

Signs and Advertising Displays

Silverware and Plated Ware

Skilled Nursing Care Facilities

Small Arms Ammunition

Small Arms

Soap and Other Detergents Manufacturing

Soil Dust

Space Research and Technology

Space Vehicle Parts and Equipment, nec

Space Propulsion Units and Parts Manufacturing

Special Dies, Tools, Jigs and Fixtures

Special Industry Machinery, nec

Special Trade Contractors, nec

Specialty Hospitals Exc. Psychiatric

Speed Changers, Drives, and Gears

Sporting and Athletic Goods Manufacturing

Stainless Steel Manufacture - EAF

Stationary IC Engines - Diesel

Stationary IC Engines - Natural Gas Steam And Air-conditioning Supply

Steel Pipe and Tubes Manufacturing

Structural Clay Products, nec

Structure Fires

Surface Active Agents Manufacturing

Surface Coating Operations

Surgical and Medical Instruments Manufacturing

Taconite Iron Ore Processing

Telephone and Telegraph Apparatus

Textile Machinery

Tire Cord and Fabric

Tire Manufacturing

Tires and Inner Tubes

Top & body repair and paint shops (1987)

Transformers, Except Electronic

Travel Trailers and Campers Manufacturing

Truck Trailers

Truck and Bus Bodies

Trucking, Except Local

Turbines and Turbine Generator Sets

Turbines - Natural Gas U.S. Postal Service

Unpaved Road Dust

Unsupported Plastics Profile Shapes Unsupported Plastics Film & Sheet

Utility Boilers: Coke

Utility Boilers: Natural Gas Combustion

Utility Boilers: Oil Combustion, all types

Valves and Pipe Fittings Manufacturing

Vehicular Lighting Equipment

Vitreous Plumbing Fixtures

Vitreous China Table and Kitchenware

Waste Disposal: Open Burning (all categories)

Water supply

Wood Products

Wool Fiberglass Manufacturing

X-ray Apparatus and Tubes

CADMIUM AND COMPOUNDS

Adhesives and Sealants

Aerospace Industry (Surface Coating)

Agricultural Production

Air, Water, & Solid Waste Management

Aircraft Manufacturing

Aircraft Parts and Equipment Manufacturing

Aircraft And Parts

Airports, Flying Fields, & Services

Aluminum Extruded Products

Aluminum Foundries

Aluminum Foundries (Castings)

Aluminum Die-Castings

Ammunition, Except for Small Arms

Amusement Parks

Animal Cremation

Asphalt Production

Asphalt Roofing Production

Asphalt Paving Mixtures And Blocks

Automotive stampings

Ball and Roller Bearings Manufacturing

Beet Sugar

Black Liquor Combustion

Blast Furnaces and Steel Mills

Boat Building and Repairing

Bolts, Nuts, Rivets and Washers Manufacturing

Brick and Structural Clay Tile

Cadmium Stabilizers for Plastics

Canned specialties

Canned Fruits and Vegetables

Carbon Black Manufacture

Cement, Hydraulic (not subject to Portland Cement Regulation)

Chemical Preparations

Chemical Manufacturing: Cyclic Crude and Intermediate

Production

Chromium Plating: Chromic Anodizing Plating

Coated Fabrics, not Rubberized, Manufacturing

Chromium Metal Plating

Commercial Physical Research

Commercial Printing, Letterpress, and Screen Commercial Printing, Lithographic

Commercial Printing, nec

Commercial/Institutional Boilers: Coal Combustion, all types Commercial/Institutional Heating: Anthracite Coal Combustion Commercial/Institutional Heating: Bituminous and Lignite Coal

Commercial/Institutional Heating: Distillate Oil Combustion Commercial/Institutional Heating: Natural Gas Combustion Commercial/Institutional Heating: Residual Oil Combustion Commercial/Institutional Heating: Wood/Wood Residue

Combustion

CADMIUM AND COMPOUNDS (CONTINUED)

Confectionery

Construction Machinery Manufacturing

Construction Sand And Gravel Construction (SICs 15-17) Copper Rolling and Drawing Correctional Institutions

Cotton

Cottonseed Oil Mills

Courts

Crop Services

Crop Preparation Services For Market Crude petroleum and natural gas Crude Petroleum Pipelines Crushed And Broken Limestone

Crushed And Broken Stone, Nec Crushed And Broken Granite

Custom Compound Purchased Resins Manufacturing

Dehydrated fruits, vegetables, and soups

Depository Institutions Durable Goods, Nec

Electric and other services combined

Electric services

Electron Tubes Manufacturing Electronic Computers Electronic Connectors Electronic Components, nec Engine Electric Equipment

Engineering Services

Environmental Controls Manufacturing Fabricated Structural Metal Manufacturing

Fabricated Metal Products, nec Ferroalloy Ores, Except Vanadium

Flat Glass

Flour and other grain mill products

Fluid power Valves and Hose Fittings Manufacturing Food and Agricultural Products: Cotton Ginning

Frozen fruits, fruit juices and vegetables Funeral Service And Crematories Gas And Other Services Combined General Medical & Surgical Hospitals

Glass Containers

Gold Ores

Gray and Ductile Iron Foundries

Grocery Stores

Guided Missiles and Space Vehicles Manufacturing

Halogenated Solvent Cleaners Hardware Manufacturing Heating Equipment, Except Electric

Heavy Construction, Nec

Hospitals

Hotels And Motels

Household Cooking Equipment

Human Cremation

Hydrochloric Acid Production

Industrial Boilers: Bituminous and Lignite Coal Combustion

Industrial Boilers: Anthracite Coal Combustion

Industrial Boilers: Coal, all types

Industrial Boilers: Distillate Oil Combustion Industrial Boilers: Natural Gas Combustion Industrial Boilers: Residual Oil Combustion Industrial Boilers: Waste Oil Combustion

Industrial Boilers: Wood/Wood Residue Combustion

Industrial machinery and equipment

Industrial Machinery, nec

Industrial Organic Chemicals Manufacturing

Industrial Sand

Industrial/Utility Dist. Oil/Diesel Turbines

Inorganic Pigments Manufacturing (Cadmium only)

Instruments to Measure Electricity Intercity & Rural Bus Transportation Internal Combustion Engine Manufacturing Iron and Steel Foundries: Steel Foundries

Iron and Steel Forging

Lead Pencils, Art Goods Manufacturing

Life Insurance Lighting Equipment Lightweight Aggregate Kilns

Lime

Lubricating Oils and Greases

Malt Beverages

Manufacturing Industries Manufacturing

Marine Cargo Handling

Metal coating and allied services (3479) Metal Heat Treating Manufacturing Metal Sanitary Ware Manufacturing

Metal cans (3411) Mineral Wool

Mineral Wool Manufacturing (includes Wool Fiberglass)

Minerals, Ground or Treated Production Miscellaneous Nonmetallic Minerals Miscellaneous Metal Work

Mobile Sources: On- Road Vehicles

Mobile Sources: Non-Road Vehicles and Equipment -

Commercial Marine Vessels MON - Continuous Processes Motion Picture & Video Production Motor and Generators Manufacturing

Motor Vehicle Parts and Accessories Manufacturing

National Security Natural Gas Liquids Non-road Mobile Vehicles

Non-stainless Steel Manufacture - EAF Noncommercial research organizations (1987) Nonferrous Wire Drawing and Insulating Nonferrous Rolling and Drawing

Nonferrous Foundries, nec

Nonmetallic Mineral Products Manufacturing

Nursing And Personal Care, Nec Oil And Gas Field Services, Nec On-Site Waste Incineration

Ordnance and Accessories Manufacturing

Ornamental Nursery Products

Other Cadmium Compound Production Other Structural Clay Products

Paints and Allied Products Manufacturing

Paved Road Dust Petroleum Refining

Petroleum Bulk Stations and Terminals

Petroleum Refining

Petroleum Refining: Other Petroleum Products Pharmaceutical Preparations Manufacturing Plastics Materials and Resins Manufacturing

Plastics Products Manufacturing Plastics Foam Products Manufacturing Portland Cement Manufacture: All Fuels

Prepackaged Software

Prepared Feeds Manufacturing

Pressed and Blown Glass and Glassware Manufacturing

CADMIUM AND COMPOUNDS (CONTINUED)

Primary Copper

Primary Batteries, Dry and Wet, Manufacturing

Primary Metal Products Manufacturing

Pulp mills (2611)

Pulp and Paper: Kraft Recovery Furnaces

Radio and Television Communications Equipment (3663)

Railroads, Line-haul Operating

Raw cane sugar Ready-mixed Concrete

Refrigeration and Heating Equipment Manufacturing

Refuse Systems Repair services, nec

Residential Bituminous and Lignite Coal Combustion

Residential Care

Residential Distillate Oil Combustion

Residential lighting fixtures

Residential Anthracite Coal Combustion Residential Wood/Wood Residue Combustion

Rice Milling

Sawmills and Planing Mills, general Schools & Educational Services, Nec

Scrap And Waste Materials

Screw Machine Products, Bolts, etc. Search and Navigation Equipment Secondary Aluminum Smelting

Secondary Nonferrous Metals Production

Secondary Zinc Production

Semiconductors and Related Devices Service Industry Machinery

Sewerage Systems Sheet Metal Work

Ship Building And Repairing Skilled Nursing Care Facilities

Soap and Other Detergents Manufacturing

Soil Dust

Space Research and Technology

Space Propulsion Units and Parts Manufacturing

Specialty Hospitals Exc. Psychiatric Stainless Steel Manufacture - EAF Stationary IC Engines - Diesel Stationary IC Engines - Natural Gas Steam And Air-conditioning Supply Storage Batteries Manufacturing Structural Clay Products, nec Telephone and Telegraph Apparatus

Tire Manufacturing Tires and Inner Tubes

Top & body repair and paint shops (1987) Travel Trailers and Campers Manufacturing

Trucking, Except Local

Turbines and Turbine Generator Sets

Turbines - Natural Gas Unpaved Road Dust

Unsupported Plastics Film & Sheet Utility Boilers: Coal Combustion, all types

Utility Boilers: Coke

Utility Boilers: Natural Gas Combustion Utility Boilers: Oil Combustion, all types Valves and Pipe Fittings Manufacturing

Water supply Wood Products

DIOXINS AND FURANS (MEASURED AS 2,3,7,8-TCDD TEQ)

Carbon Reactivation Furnaces

Commercial/Institutional Heating: Anthracite Coal Combustion Commercial/Institutional Heating: Bituminous and Lignite Coal

Combustion

Commercial/Institutional Heating: Wood/Wood Residue

Combustion

Drum and Barrel Reclamation Hazardous Waste Incineration

Industrial Boilers: Anthracite Coal Combustion

Industrial Boilers: Bituminous and Lignite Coal Combustion

Lightweight Aggregate Kilns

Portland Cement Manufacture: Hazardous Waste-fired

Pulp and Paper: Kraft Recovery Furnaces

Residential Bituminous and Lignite Coal Combustion

Residential Anthracite Coal Combustion

Scrap Tire Combustion Secondary Copper Smelting Secondary Lead Smelting Sewage Sludge Incineration Utility Boilers: Coke

POLYCYCLIC AROMATIC HYDROCARBONS (MEASURED AS 16-PAH)

Abrasive Products Chemical Manufacturing: Naphthalene Adhesives and Sealants

Agricultural Chemicals and Pesticides

Aircraft Parts and Equipment Manufacturing

Aircraft Manufacturing Aluminum Extruded Products Aluminum Foundries

Aluminum Sheet, Plate, and Foil manufacturing

Animal Cremation Asphalt Felts And Coatings Asphalt Paving Production Blast Furnaces and Steel Mills Carbamate Insecticides Production

Carbon and Graphite Products Cement, Hydraulic (not subject to Portland Cement Regulation)

Chemical Manufacturing: Alkalies and Chlorine

Chemical Manufacturing: Cyclic Crude and Intermediate

Production

Chemical Manufacturing: Naphthalene Sulfonates

Chemical Preparations Cigarette Smoke Clay Refractories

Coke Ovens: By-product Recovery Plants

Cold Finishing of Steel Shapes

Commercial/Institutional Heating: POTW Digester Gas

Combustion

Commercial Physical Research Commercial Printing, Gravure

Commercial Printing, Letterpress, and Screen

POLYCYCLIC AROMATIC HYDROCARBONS (MEASURED AS 16-PAH) (CONTINUED)

Commercial/Institutional Heating: Anthracite Coal Combustion Commercial/Institutional Heating: Bituminous and Lignite Coal

Combustion

Commercial/Institutional Heating: Distillate Oil Combustion Commercial/Institutional Heating: Natural Gas Combustion Commercial/Institutional Heating: Residual Oil Combustion Commercial/Institutional Heating: Wood/Wood Residue

Combustion

Construction Machinery Manufacturing

Drum and Barrel Reclamation Fabric Dress and Work Gloves Fabricated Plate Work (Boiler Shops) Fabricated Metal Products, nec Fabricated Rubber Products, nec

Fabricated Structural Metal Manufacturing

Ferroalloy Manufacture

Fiber Cans, Drums, and Similar Products Gray and Ductile Iron Foundries Gum and Wood Chemical Manufacturing Hard Surface Floor Coverings Manufacturing

Household Cooking Equipment Household Appliances Manufacturing

Human Cremation

Hydrochloric Acid Production

Industrial Boilers: Waste Oil Combustion Industrial Boilers: Anthracite Coal Combustion

Industrial Boilers: Bituminous and Lignite Coal Combustion

Industrial Boilers: Distillate Oil Combustion Industrial Boilers: Natural Gas Combustion Industrial Boilers: Residual Oil Combustion

Industrial Boilers: Wood/Wood Residue Combustion

Industrial Gases Manufacturing

Industrial Inorganic Chemical Manufacturing

Integrated Iron and Steel Mills

Internal Combustion Engine Manufacturing

Landfills: Gas Flares Lubricating Oils and Greases

Manufacturing Industries Manufacturing

Meat Packing Plants Medical Waste Incineration

Medicinals and Botanicals Manufacturing Metal Barrels, Drums, and Pails Manufacturing

Metal Coil (Surface Coating)
Metal Doors, Sash, and Trim
Metal Household Furniture
Miscellaneous Plastics Products
Miscellaneous Chemical Products (2890)

Mobile Sources: Non-Road Vehicles and Equipment - Aircraft

Mobile Sources: Non-Road Vehicles and Equipment -

Commercial Marine Vessels

Mobile Sources: Non-Road Vehicles and Equipment - Other

Mobile Sources: On- Road Vehicles

Motor Vehicle Equipment

Motor Vehicles and Car Bodies Manufacturing

Municipal Waste Combustion Naphthalene: Miscellaneous Uses

Needles, Pins, Hooks and Eyes and Similar Notions

Non-stainless Steel Manufacture - EAF Nonferrous Wire Drawing and Insulating Nonmetallic Mineral Products Manufacturing Office Furniture, Except Wood Manufacturing Oil and Gas Field Machinery Manufacturing

Other Structural Clay Products

Paints and Allied Products Manufacturing Paper Coated and Laminated, Packaging, nec

Paper Mills

Partitions and Fixtures, Except Wood Petroleum Bulk Stations and Terminals

Petroleum Refining

Pharmaceutical Preparations Manufacturing

Phthalic Anhydride Production

Plastics Materials and Resins Manufacturing Plastics Foam Products Manufacturing Polishes and Sanitation Goods Manufacturing

Potato Chips and Similar Snacks Primary Nonferrous Metals Production Public Building and Related Furniture Publicly Owned Treatment Works (POTWs)

Refrigeration and Heating Equipment Manufacturing

Residential Anthracite Coal Combustion

Residential Bituminous and Lignite Coal Combustion

Residential Distillate Oil Combustion Residential Natural Gas Combustion

Residential Wood/Wood Residue Combustion

Scrap Tire Combustion Secondary Lead Smelting Sewage Sludge Incineration Sheet Metal Work Ship Building & Repair

Soap and Other Detergents Manufacturing Sporting and Athletic Goods Manufacturing

Stainless Steel Manufacture - EAF Stationary IC Engines - Diesel Stationary IC Engines - Natural Gas Surface Active Agents Manufacturing

Tire Manufacturing

Transformers, Except Electronic

Truck and Bus Bodies Turbines - Natural Gas Utility Boilers: Coke

Utility Boilers: Coal Combustion, all types Utility Boilers: Natural Gas Combustion Utility Boilers: Oil Combustion, all types Wood Household Furniture Manufacturing

Wood Treatment/Wood Preserving

Yarn Spinning Mills

Appendix B

Detailed Breakdown of Air Emissions Inventory by Pollutant for Source Categories Emitting Less than 1 Percent of Total U.S. Emissions

POLYCHLORINATED BIPHENYLS

Adhesives and Sealants Air, Water, & Solid Waste Management Animal Cremation Commercial Printing, Lithographic Electric services

Industrial Boilers: Wood/Wood Residue Combustion

Landfills: Gas Flares Minerals, Ground or Treated Production Petroleum Refining Secondary Nonferrous Metals Production Services, Nec

APPENDIX C Fish Consumption Advisories Issued for the Great Waters

Waterbody	PCBs	Dioxins	Hg	Cadmium	Chlordane	Toxaphene	Mirex	DDT	Dieldrin	Kepone	Others
Great Lakes											
Lake Superior	•		•		•	•					
Lake Michigan	•		•		•						
Lake Huron	•	•			•						
Lake Erie	•										
Lake Ontario	•	•					•				
				Other	Great Waters						
Chesapeake Bay											
Potomac River ^a	•	•			•						
James River ^a										•	
Back River ^a					•						
Baltimore Harbor ^a					•						
Anacostia River ^a	•				•						
Lake Champlain, NY	•		•								
				NEP a	nd NERR Sites						
Casco Bay, ME (NEP)		•									
Wells, ME (NERR)		•									
Great Bay, NH (NERR)	•										
Great Bay, Little Bay, and Hampton Harbor, NH (NEP)	•										
Massachusetts Bays, MA (NEP)			•								• b
Buzzards Bay, MA (NEP)	•		•								

Appendix C Fish Consumption Advisories Issued for the Great Waters

Waterbody	PCBs	Dioxins	Hg	Cadmium	Chlordane	Toxaphene	Mirex	DDT	Dieldrin	Kepone	Others
Waquoit Bay, MA (NERR)			•								
Narragansett Bay, RI (NEP) (NERR)	•										
Long Island Sound, NY/CT (NEP)	•	•		•							
Peconic Bay, NY (NEP)	•	•		•							
Hudson River, NY (NERR)	•			•							
New York/New Jersey Harbor (NEP)	•	•		•	•						
Barnegat Bay, NJ (NEP)	•										
Jacques Cousteau-Great Bay and Mullica River, NJ (NERR)	•										
Old Woman Creek, OH (NERR)											
Delaware Estuary, DE/NJ/PA (NEP) (NERR)	•	•		•	•						
Delaware Inland Bays, DE (NEP)											
Maryland Coastal Bays, MD (NEP) (includes Assawoman, Isle of Wight, Sinepuxent, Newport, and Chincoteague Bays)											
Chesapeake Bay, MD (NERR)											
Chesapeake Bay, VA (NERR)											
Albemarle-Pamlico Sounds, NC (NEP)		•									
NC Coastal sites (NERR) (4 reserves)											

Waterbody	PCBs	Dioxins	Hg	Cadmium	Chlordane	Toxaphene	Mirex	DDT	Dieldrin	Kepone	Others
North Inlet/Winjah Bay, SC (NERR)											
Ashepoo-Combahee-Edisto Basin, SC (NERR)			•								
Sapelo Island, GA (NERR)											
Indian River Lagoon, FL (NEP)			•								
San Juan Bay, PR (NEP)											
Jobos Bay, PR (NERR)											
Charlotte Harbor, FL (NEP)			•								
Rookery Bay, FL (NERR)			•								
Sarasota Bay, FL (NEP)			•								
Tampa Bay, FL (NEP)			•								
Apalachicola Bay, FL (NERR)			•								
Mobile Bay, AL (NEP)			•								
Weeks Bay, AL (NERR)			•								
Barataria-Terrebonne Estuarine Complex, LA (NEP)			•								
Galveston Bay, TX (NEP)		•	•								
Corpus Christi Bay, TX (NEP)			•								
Kachemak Bay, AK (NERR)											
Padilla Bay, WA (NERR)											
Puget Sound, WA (NEP)	•	•	•								• c
Columbia River, OR/WA (NEP)	•	•						•			
Tillamook Bay, OR (NEP)											

Appendix C
Fish Consumption Advisories Issued for the Great Waters

Waterbody	PCBs	Dioxins	Hg	Cadmium	Chlordane	Toxaphene	Mirex	DDT	Dieldrin	Kepone	Others
South Slough, OR (NERR)											
San Francisco Bay, CA (NEP)	•	•	•		•			•	•		• d
Elkhorn Slough, CA (NERR)											
Morro Bay, CA (NEP)											
Santa Monica Bay, CA (NEP)	•							•			
Tijuana River, CA (NERR)											

^a Major tributary rivers to the Chesapeake Bay

Note: Shading is used in rows to designate waters where no advisories were in effect as of December 31, 1997. Source: U.S. EPA 1998m (Advisories current through December 31, 1997).

^b Multiple pollutants (unspecified)

[°] Specific embayments of Puget Sound are listed for the following pollutants; creosote, pentachlorophenol, volatile organic compounds (VOCs), tetrachloroethylene, arsenic, metals (unspecified), vinyl chloride, polyaromatic hydrocarbons (PAHs), polynuclear aromatics, and pesticides (unspecified).

^d Other unspecified pesticides.

APPENDIX D

Names of Numbered Sites from Figure II-17: Locations of Watersheds Designated as Areas of Probable Concern

Map#	Watershed Name	Map #	Watershed Name
1	Charles	49	Watts Bar Lake
2	Cape Cod	50	Lower Clinch
3	Narragansett	51	Middle Tennessee-Chickamauga
4	Hackensack-Passaic	52	Hiwassee
5	Sandy Hook-Staten Island	53	Guntersville Lake
6	Raritan	54	Pickwick Lake
7	Southern Long Island	55	Lower Tennessee-Beech
8	Middle Delaware-Musconetcong	56	Kentucky Lake
9	Lower Delaware	57	Twin Cities
10	Schuylkill	58	Rush-Vermillion
11	Mullica-Toms	59	Buffalo-Whitewater
12	Gunpowder-Patapsco	60	Castle Rock
13	Conococheague-Opequon	61	Copperas-Duck
14	Lower Pee Dee	62	Kishwaukee
15	Seneca	63	Chicago
16	Middle Savannah	64	Des Plaines
17	Lower St. Johns	65	Upper Fox
18	Middle Chattahoochee-Lake Harding	66	Lower Illinois-Senachwine Lake
19	Choctawhatchee Bay	67	Cahokia-Joachim
20	Perdido Bay	68	Big Muddy
21	Mobile Bay	69	Upper Kaskaskia
22	Door-Kewaunee	70	Middle Kaskaskia
23	Menominee	71	Lower Mississippi-Memphis
24	Lower Fox	72	Deer-Steele
25	Little Calumet-Galien	73	Lower Ouachita
26	Pike-Root	74	Lower Calcasieu
27	Milwaukee	75	Lower Mississippi-New Orleans
28	St. Joseph	76	Lower Kansas

Map#	Watershed Name	Мар#	Watershed Name
29	Manistee	77	Spring
30	Lake St. Clair	78	Lower Neosho
31	Detroit	79	Buffalo-San Jacinto
32	Ottawa-Stony	80	Coeur D'Alene Lake
33	Raisin	81	Lower Yakima
34	Cedar-Portage	82	Lower Willamette
35	Huron-Vermillion	83	Strait of Georgia
36	Black-Rocky	84	Duwamish
37	Ashtabula-Chagrin	85	Puyallup
38	Chautauqua-Conneaut	86	Puget Sound
39	Buffalo-Eighteenmile	87	Tulare-Buena Vista Lakes
40	Niagara	88	Coyote
41	Oak Orchard-Twelvemile	89	San Francisco Bay
42	Upper St. Lawrence	90	Santa Monica Bay
43	Upper Ohio	91	Los Angeles
44	Shenango	92	San Pedro Channel Islands
45	Tuscarawas	93	Seal Beach
46	Vermilion	94	Newport Bay
47	Middle Wabash-Busseron	95	Aliso-San Onofre
48	Holston	96	San Diego

Source: U.S. EPA 1997i